

Science

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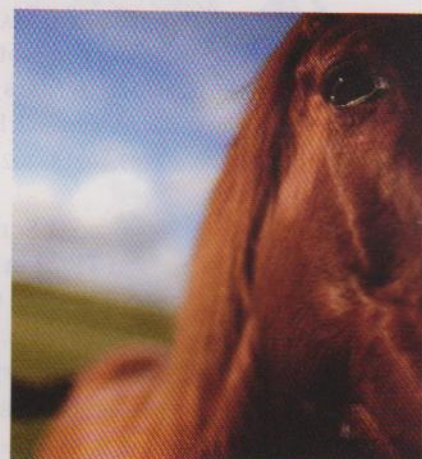
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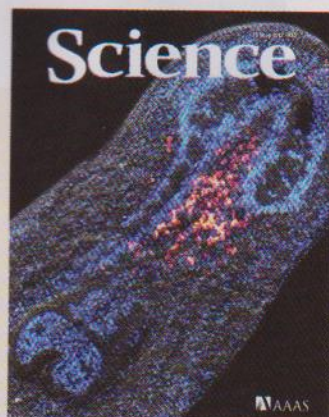
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COVER

Composite confocal image of an adult planarian (*Schmidtea mediterranea*) showing a growing colony of dividing cells (red) that initiated from a single, pluripotent stem cell called a clonogenic neoblast (cNeoblast). The ~1-millimeter-long animal is visualized with differential interference contrast microscopy and nuclear staining (blue). The colony is just posterior to the animal brain (nuclei-rich, bi-lobed structure) and eyes (two dark pigmented areas). See page 811.

Credit: Daniel E. Wagner, Irving E. Wang, Peter W. Reddien/Department of Biology, Massachusetts Institute of Technology, Whitehead Institute for Biomedical Research

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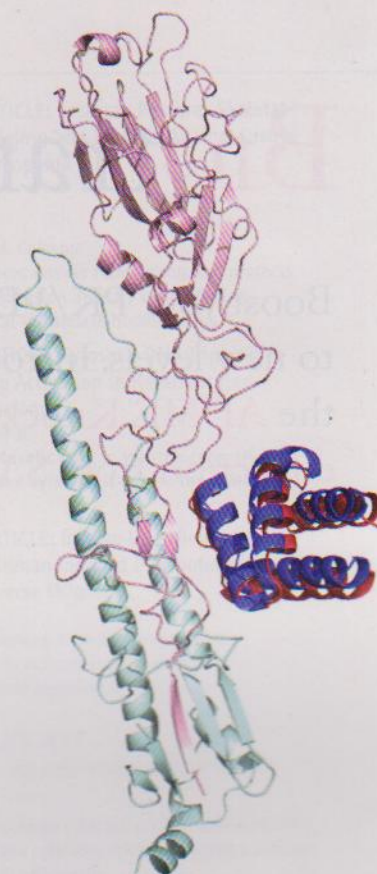
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A pluripotent adult stem cell underlies flatworms' amazing regenerative ability.
>> *Perspective p. 799; Report p. 852*
- 816** Computational Design of Proteins Targeting the Conserved Stem Region of Influenza Hemagglutinin
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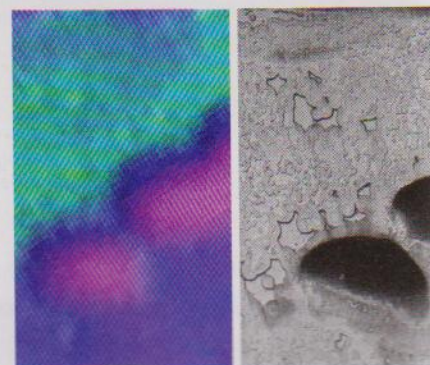
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Magnetic field measurements made near Jupiter's moon Io strengthen the evidence for a magma ocean in its interior.

10.1126/science.1201425

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Activated microwave-exfoliated graphite oxide combined with an ionic liquid can be used to make an enhanced capacitor.

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Optical interference in a photorefractive crystal is used to study light propagation in a controlled disordered system.

10.1126/science.1202977

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An intermediate structure provides insight into how a transport substrate allosterically activates adenosine triphosphatase activity.

10.1126/science.1200767

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RESEARCH ARTICLE: Methylation of a Phosphatase Specifies Dephosphorylation and Degradation of Activated Brassinosteroid Receptors

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PERSPECTIVE: PP2A Phosphatases—The “On-Off” Regulatory Switches of Brassinosteroid Signaling

S. Di Rubbo et al.

The abundance of brassinosteroid receptors and thus the intensity of brassinosteroid signaling are set by methylation of a protein phosphatase.

RESEARCH ARTICLE: A Peptide-Based Target Screen Implicates the Protein Kinase CK2 in the Global Regulation of Caspase Signaling

J. S. Duncan et al.

PERSPECTIVE: Protein Kinases Curb Cell Death

O. Filhol and C. Cochet

Phosphorylation of caspase substrates by the protein kinase CK2 may underlie its role in tumorigenesis.

GLOSSARY

Find out what AAM, BFA, and cSMAC mean in the world of cell signaling.

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E. Pain

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A. Marnett

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COMMENTARY: Universal Design of Research—Inclusion of Persons with Disabilities in Mainstream Biomedical Studies

A. S. Williams and S. M. Moore

Simple changes in clinical study design allow individuals with disabilities to participate in and contribute to research.

PERSPECTIVE: Diagnosing the Individual to Control the Epidemic

G. F. Medley

Infection experiments help to elucidate how epidemics propagate through individuals.

RESEARCH ARTICLE: Losartan Restores Skeletal Muscle Remodeling and Protects Against Disuse Atrophy in Sarcopenia

T. N. Burks et al.

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R. D. Cohn and A. Colmone

Losartan improves muscle remodeling and protects against immobilization atrophy by mediating pathways critical for muscle homeostasis.

RESEARCH ARTICLE: Cytosolic DNA Triggers Inflammasome Activation in Keratinocytes in Psoriatic Lesions

Y. Dombrowski et al.

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RESEARCH ARTICLE: In Vivo Liver Regeneration Potential of Human Induced Pluripotent Stem Cells from Diverse Origins

H. Liu et al.

Hepatic cells derived from human induced pluripotent stem cells of various origins contribute to liver regeneration in vivo.

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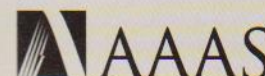
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